

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A rotary unit[.]] of an FFS (Form, Fill and Seal) machine[.]] for ultrasound sealing of a continuous tubular strip housing an orderly succession of products and fed along a feed path extending through a sealing station[.]] the rotary unit ~~being characterized by~~ comprising:

two rotors located on opposite sides of the feed path, ~~and which rotate~~ rotating in opposite directions about respective axes of rotation, and having ~~have~~ respective pitch surfaces tangent to each other and to the feed path;

an ultrasound sealing head[.]] forming part of one of the two rotors[.]] and cooperating ~~cooperates~~ at the sealing station with a corresponding anvil forming part of the other rotor[.]] to close the tubular strip along a transverse seal line located at a respective portion of the tubular strip extending between two respective adjacent products, ~~and~~ the sealing head comprising a respective actuating device coaxial with an axis of the sealing head,

wherein each of said two rotors comprises a predetermined number of sealing heads and an equal number of anvils, wherein the two rotors are identical, wherein each sealing head has a respective sealing surface and each anvil has a respective contrast surface, and wherein said sealing surface and said contrast surface define respective portions of the pitch surface of a respective rotor.

2. (Cancelled)

3. (Currently Amended) A unit as claimed in claim 1 ~~2~~, wherein said sealing surfaces and said contrast surfaces of each rotor alternate along the pitch surface of the respective rotor and about the respective ~~said~~ axis of rotation.

4. **(Currently Amended)** A unit as claimed in claim 3, wherein each sealing surface ~~of each rotor defines;~~ with each adjacent contrast surface of each rotor defines an arc extending ~~and~~ along the respective pitch surface; ~~an arc extending~~ about the respective axis of rotation and subtended by a central angle which is constant for each pair of adjacent sealing and contrast surfaces.

5. **(Original)** A unit as claimed in claim 4, wherein the two rotors are offset angularly by said central angle.

6. **(Original)** A unit as claimed in claim 1, wherein each said rotor comprises only one sealing head having a respective sealing surface; and only one anvil having a respective contrast surface; said sealing surface and said contrast surface being diametrically opposite along the pitch surface of the respective rotor.

7. **(Original)** A unit as claimed in claim 6, wherein said sealing head has a longitudinal axis perpendicular to the relative axis of rotation.

8. **(Currently Amended)** A unit as claimed in claim 1, wherein each said rotor comprises two anvils having respective contrast surfaces[.:] and two sealing heads having respective longitudinal axes positioned parallel to each other[.:] and crosswise to the relative axis of rotation[.:] and located on opposite sides of the axis of rotation; said two sealing heads having respective sealing surfaces diametrically opposite along the pitch surface of the relative rotor and lying in a first diametrical plane; and said two contrast surfaces being diametrically opposite along the pitch surface of the relative rotor and lying in a second diametrical plane perpendicular to the first diametrical plane.

9. **(Currently Amended)** A unit as claimed in claim 1, wherein each anvil has a blade which cooperates, at said sealing station, with the corresponding sealing head to cut the tubular strip along the relative transverse seal line.

10. (New) A rotary unit of an FFS (Form, Fill and Seal) machine for ultrasound sealing of a continuous tubular strip housing an orderly succession of products and fed along a feed path extending through a sealing station, the rotary unit comprising:

two rotors located on opposite sides of the feed path and rotating in opposite directions about respective axes of rotation, the two rotors having respective pitch surfaces tangent to each other and to the feed path; and

an ultrasound sealing head forming part of one of the two rotors, the sealing head cooperating at the sealing station with a corresponding anvil forming part of the other rotor to close the tubular strip along a transverse seal line located at a respective portion of the tubular strip extending between two respective adjacent products, the ultrasound sealing head comprising a respective actuating device coaxial with an axis of the sealing head,

wherein each of said two rotors comprises only one sealing head having a respective sealing surface and only one anvil having a respective contrast surface, and wherein said sealing surface and said contrast surface are diametrically opposite along the pitch surface of a respective rotor.

11. (New) A unit as claimed in claim 10, wherein said sealing head has a longitudinal axis perpendicular to the respective axis of rotation.

12. (New) A rotary unit of an FFS (Form, Fill and Seal) machine for ultrasound sealing of a continuous tubular strip housing an orderly succession of products and fed along a feed path extending through a sealing station, the rotary unit comprising:

two rotors located on opposite sides of the feed path and rotating in opposite directions about respective axes of rotation, the two rotors having respective pitch surfaces tangent to each other and to the feed path; and

an ultrasound sealing head forming part of one of the two rotors and cooperating at the sealing station with a corresponding anvil forming part of the other rotor to close the tubular strip along a transverse seal line located at a respective portion of the tubular strip extending between

two respective adjacent products, the sealing head comprising a respective actuating device coaxial with an axis of the sealing head,

wherein each of said two rotors comprises two anvils having respective contrast surfaces and two sealing heads having respective longitudinal axes parallel to each other crosswise to the relative axis of rotation and located on opposite sides of the axis of rotation, wherein said two sealing heads have respective sealing surfaces diametrically opposite along the pitch surface of the relative rotor and lying in a first diametrical plane, and wherein said two contrast surfaces are diametrically opposite along the pitch surface of the relative rotor and lie in a second diametrical plane perpendicular to the first diametrical plane.